

WHAT IS CLAIMED IS:

1 1. A door lock security system installed on board an airplane, comprising:
2 a plurality of spaced doors defining a restricted area therebetween; and
3 a controller operative to selectively open the spaced doors to control entry into the
4 restricted area.

1 2. The door lock system of claim 1, wherein the controller is operative to function in
2 an automatic mode, wherein the doors open alternately to prevent simultaneous entry into
3 the restricted area from opposite directions.

1 3. The door lock system of claim 2, further comprising a sensor located in the
2 vicinity of an outer surface of one of the plurality of doors and operative to generate an
3 enabling signal in response to a request to enter the restricted area.

1 4. The door lock system of claim 3, wherein the sensor is an electronic keypad
2 coupled to the controller and operative to generate the output signal in response to an
3 alphanumeric combination inputted by the requestor.

1 5. The door lock system of claim 4, further comprising a database for storing
2 alphanumeric combinations of authorized personnel, the controller being in
3 communication with the database and having software for comparing the inputted
4 combination and the stored combinations to generate an enabling signal in response to
5 coincidence of the input and one of the stored combinations.

1 6. The door lock system of claim 3, wherein the sensor is a biometric sensor
2 operative to generate an input signal corresponding to a physiological characteristic of a
3 requestor selected from voice, facial features, fingerprints and a combination of these, the
4 system further comprising a database for storing respective physiological characteristics
5 of authorized personnel and software executed by the controller for querying the database
6 to compare the input and stored characteristics and to generate the enabling signal upon
7 positive identification of the requestor.

1 7. The door lock system of claim 5, further comprising a plurality of door actuators
2 each operatively connected with and opening a respective door for a controlled period of
3 time in response to receiving the enabling signal.

1 8. The door lock system of claim 7, wherein the actuators are selected from the
2 group consisting of pneumatic, hydraulic, electrical and a combination of these.

1 9. The door lock system of claim 1, wherein the controller is operative to switch to
2 an emergency mode, in which the restricted area is in audio and/or visual communication
3 with an on-ground facility.

1 10. The door lock system of claim 9, further comprising a transducer coupled to the
2 controller and operative to generate an emergency signal through a communication link
3 in response to a control signal generated by the controller, or in response to the control
4 signal originated in a pilot's cabin of the airplane, the doors including an outer door
5 separating a passenger space from a front galley module and an inner door between the
6 front galley module and the pilot's cabin.

1 11. The door lock system of claim 10, further comprising an audio/visual system
2 including a video camera surveying the restricted area between the inner and outer doors
3 and a monitor located in the pilot's cabin and in communication with the video camera.

1 12. The door lock system of claim 11, wherein the video camera and the monitor are
2 switched to an on-state simultaneously with the opening of the outer door and operating
3 for a controlled period of time.

1 13. The door lock system of claim 12, wherein visual and sound signals indicative of
2 the on-state of the monitor are generated in response to the opening of the outer door.

1 14. The door lock system of claim 11, wherein the video camera and the monitor are
2 in an on-state in response to an input signal generated by a requestor located in the pilot
3 cabin to provide visual surveillance of the restricted area.

1 15. The door lock system of claim 1, wherein the controller is operative to function in
2 a manual mode, wherein the plurality of doors are opened simultaneously in response to a
3 request signal originated by an on-ground facility or in a pilot's cabin of the airplane.

1 16. The door lock system of claim 1, wherein at least one of the doors is slidable and
2 is provided with a pivoting corner to conform a contour of the slidable door with that of
3 fuselage of the airplane.

1 17. A computerized system installed on board of airplane and operative to alternately
2 unlock spaced doors defining therebetween a restricted area.

1 18. A door lock security system installed on board of airplane, comprising a
2 controller operative to open and close spaced doors defining a restricted area, and
3 functioning in:

4 a manual mode, wherein the spaced doors operate simultaneously; and
5 an automatic mode, wherein the spaced doors open alternately to minimize
6 unauthorized entry into the restricted area.

1 19. The door lock system of claim 19, wherein the controller further functions in an
2 emergency mode wherein the controller is operative to establish audio and video
3 communication between the restricted area and an on-ground facility.